AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A device for a damped elastic connection of two parts, the device comprising at least one set of two tubular cylindrical sleeves of viscoelastic material fitted one inside the other substantially coaxially along an axis with the interposition of a rigid cylindrical and substantially coaxial intermediate ring so that one of said two sleeves is an internal sleeve secured by an internal cylindrical face to an external cylindrical face of an internal rigid ring and by an external cylindrical to an internal cylindrical face of said intermediate ring separating said internal sleeve from the other sleeve of said pair of sleeves, which is an external sleeve secured, by an internal cylindrical face, to an external cylindrical face of said intermediate ring and, by an external cylindrical face to an internal cylindrical face of an external rigid ring, said internal ring and said external ring being secured, respectively, to an internal armature and to an external armature, each of which is connected to a respective one of two connecting members for connection to said parts,

wherein, said internal sleeve and said external sleeve are made of a viscoelastic material which has a shear modulus g1 and g2 respectively, and have an axial length L1 and L2 respectively, an inside radius R1 and R2 respectively and a thickness e1 and e2 respectively, giving them a geometry such that the following formula is substantially satisfied:

$$g1 . \frac{L1}{\ln(1+\frac{e1}{R1})} = g2 . \frac{L2}{\ln(1+\frac{e2}{R2})}$$ ~~; and~~

wherein each of two annular axial end faces of each of said sleeves is shaped as a meniscus delimited by a curved free surface with a concave side facing ~~axially~~ outwards~~.~~ along said axis; and

wherein said axial length of each sleeve is measured between bottoms of the meniscuses of said two annular end faces of said sleeve.

2. (Cancelled)

3. (Previously presented) Device according to Claim 1, wherein said viscoelastic material of said sleeves is an elastomer.

4. (Previously presented) Device according to Claim 3, wherein said elastomer of said sleeves is a silicone elastomer with a high loss angle value as high as about 45°.

5. (Previously presented) Device according to Claim 1, wherein each sleeve is moulded and preloaded in compression between said rigid rings to which said sleeve is secured by said internal and external cylindrical faces of said sleeve.

6. (Previously presented) Device according to Claim 5, wherein said external sleeve is preloaded by shrink-fitting said external rigid ring.

7. (Previously presented) Device according to Claim 6, wherein said shrink-fitting of said external rigid ring is brought about by plastic deformation of said external rigid ring radially inwards.

8. (Previously presented) Device according to Claim 5, wherein said internal sleeve is preloaded by radial expansion of said internal rigid ring.

9. (Previously presented) Device according to Claim 8, wherein said radial expansion of said internal rigid ring outwards is brought about by plastic deformation of said internal rigid ring.

10. (Previously presented) Device according to Claim 1, wherein said set of two sleeves is shrink-fitted into said external armature, arranged as an outer sheath.

11. (Previously presented) Device according to Claim 1, wherein said external ring of said set has, at an axial end facing towards the connecting member to which said external ring is connected, a radially thicker part to which said external armature is removably connected by fixing means.

12. (Previously presented) Device according to Claim 11, wherein said external ring of said set is shrunk-on by cold rolling of a part of said external ring extending in line with said external sleeve of said set.

13. (Previously presented) Device according to Claim 1, wherein at least one of said internal and said external rings of said set is incorporated into said internal armature or external armature, respectively.

14. (Previously presented) Device according to Claim 1, wherein said two connecting members are threaded ball ends with screw threads of the same hand but different pitch, each of said threaded ends being screwed into a tapped bore of one of said external and internal armatures, respectively, so as to allow the axial length of the device to be adjusted, locked locking nuts being screwed on to the threaded ends and pressed against said armatures so as to fix said axial length of the device after adjustment of the device.

15. (Currently Amended) A method of manufacturing a device for damped elastic connection of two parts, the device comprising at least one set of two tubular cylindrical sleeves of viscoelastic material fitted one inside the other substantially coaxially <u>along an axis</u> with the interposition of a rigid cylindrical and substantially coaxial intermediate ring so that one of said two sleeves is an internal sleeve secured by an internal cylindrical face to an external cylindrical face of an internal rigid ring and by an external cylindrical face to an internal cylindrical face of said intermediate ring separating said internal sleeve from the other sleeve of said pair of sleeves, which is an external sleeve secured by an internal cylindrical face to an

external cylindrical face of said intermediate ring and by an external cylindrical face to an internal cylindrical face of an external rigid ring, said internal ring and said external ring being secured respectively to an internal armature and to an external armature, each of which is connected to a respective one of two connecting members for connection to said parts, said internal sleeve and said external sleeve being made of a viscoelastic material which has a shear modulus g1 and g2 respectively, and have an axial length L1 and L2 respectively, an inside radius R1 and R2 respectively and a thickness e1 and e2 respectively, giving them a geometry such that the following formula is substantially satisfied

$$g1 . \frac{L1}{\ln(1+\frac{e1}{R1})} = g2 . \frac{L2}{\ln(1+\frac{e2}{R2})} \qquad \cancel{; \text{and}}$$

wherein each of two annular axial end faces of each of said sleeves is shaped as a meniscus delimited by a curved free surface with a concave side facing ~~axially~~ outwards~~;~~ along said axis; and

wherein said axial length of each sleeve is measured between bottoms of the meniscuses of said two annular end faces of said sleeve;

the method comprising for manufacturing said at least one set of two sleeves, at least the steps consisting in :

- moulding said internal sleeve of said set between, on the one hand, one of said internal ring of said set and said internal armature and, on the other hand, said intermediate ring,

- shrinking said intermediate ring so as to preload said internal sleeve in compression,

- moulding said external sleeve around said intermediate ring and between said intermediate ring and said external ring which is radially on the outside,

- shrinking said external ring so as to preload said external sleeve in compression.

16. (cancelled)

17. (Previously presented) Device according to claim 1, wherein said set of two sleeves is shrink-fitted around said internal armature of cylindrical shape.

18. (New) Device according to claim 1, wherein both axial length of the internal cylindrical face of each of the sleeves and axial length of the external cylindrical face of the sleeve are longer than the axial length of the sleeve as measured between bottoms of the corresponding meniscuses.